

I CLAIM:

1. A method of adaptively connecting a video source and a video display, comprising:

- (a) coupling a video source to a video display with a coupling device;
- (b) automatically determining whether the video source is an analog video source or a digital video source;
- (c) automatically determining whether the video display is an analog video display or a digital video display; and
- (d) configuring the coupling device based on (b) and (c).

2. A method as recited in claim 1, wherein when the determining (b) and (c) are each digital, then the configuring comprises:

configuring the coupling device as a doubly terminated twisted pair type connector having a number of communication channels included therein.

3. A method as recited in claim 2, further comprising:

- receiving video data from the video source;
- packetizing the video data to form a packetized video data stream formed of a number of video data packets;
- passing the video data packets by way of selected ones of the communication channels from the video source to the video display;
- depacketizing the video data packets at the video display; and
- generating a displayable image based upon the depacketized video data.

4. The method of claim 3, further comprising:
encoding video data from the video source from an 8-bit format to a 10-bit format;
transmitting the encoded video data from the video source to the video display;
converting the encoded video data from the 10-bit format to the 8-bit format at the video display and
providing the data to the video display in the 8-bit format.

5. The method of claim 4, wherein the communication channel is formed of a main link having an associated main link data rate and an auxiliary link having an auxiliary link data rate.

6. The method as recited in claim 5, wherein the source video data is pixel data provided at a native clock rate, wherein the pixel data is transmitted at the link data rate that is different than the native clock rate.

7. The method as recited in claim 6, wherein the main link data is encoded using 8B/10B encoding and wherein the auxiliary link data is encoded using Manchester II encoding.

8. A configurable connector for coupling a video source with a video display, comprising:
a processor for making a first automatic determination of whether the video source is an analog video source or a digital video source and for making a second

automatic determination of whether the video display is an analog video display or a digital video display; and

at least one switch for configuring the coupling device under control of the processor according to the first determination and the second determination.

9. A connector of claim 8, wherein the configuring the coupling device is a doubly terminated twisted pair type connector having a number of communication channels included therein.

10. A connector as recited in claim 9, further comprising:
a receiver unit for receiving video data from the video source;
a packetizer for packetizing the video data to form a packetized video data stream formed of a number of video data packets that are passed by way of selected ones of the communication channels from the video source to the video display;
a depacketizer for depacketizing the video data packets at the video display;
and
an image generator for generating a displayable image based upon the depacketized video data.

11. A connector as recited in claim 10, further comprising:
a first encoder for encoding video data from the video source from an 8-bit format to a 10-bit format;
a transmitter unit for transmitting the encoded video data from the video source to the video display; and

a decoder for converting the encoded video data from the 10-bit format to the 8-bit format at the video display and provides the data to the video display in the 8-bit format.

12. A connector as recited in claim 11, wherein the communication channel is formed of a main link having an associated main link data rate and an auxiliary link having an auxiliary link data rate.

13. A connector as recited in claim 12, wherein the source video data is pixel data provided at a native clock rate, wherein the pixel data is transmitted at the link data rate that is different than the native clock rate.

14. A connector as recited in claim 13, wherein the main link data is encoded using 8B/10B encoding and wherein the auxiliary link data is encoded using Manchester II encoding.

15. Computer program product for adaptively connecting a video source and a video display, comprising:

computer code for coupling a video source to a video display with a coupling device;

computer code for automatically determining whether the video source is an analog video source or a digital video source;

computer code for automatically determining whether the video display is an analog video display or a digital video display;

computer code for configuring the coupling device based on the determinations; and

computer readable medium for storing the computer code.

16. Computer program product as recited in claim 15, wherein when it is determined that the video source and the video display are each digital, then the computer code for configuring comprises:

computer code for configuring the coupling device as a doubly terminated twisted pair type connector having a number of communication channels included therein.

17. Computer program product as recited in claim 16, further comprising:

computer code for receiving video data from the video source;

computer code for packetizing the video data to form a packetized video data stream formed of a number of video data packets;

computer code for passing the video data packets by way of selected ones of the communication channels from the video source to the video display;

computer code for depacketizing the video data packets at the video display;

and

computer code for generating a displayable image based upon the depacketized video data.

18. Computer program product as recited in claim 17, further comprising:

computer code for encoding video data from the video source from an 8-bit format to a 10-bit format;

computer code for transmitting the encoded video data from the video source to the video display;

computer code for converting the encoded video data from the 10-bit format to the 8-bit format at the video display and

computer code for providing the data to the video display in the 8-bit format.

19. Computer program product as recited in claim 18, wherein the communication channel is formed of a main link having an associated main link data rate and an auxiliary link having an auxiliary link data rate.

20. Computer program product as recited in claim 19, wherein the source video data is pixel data provided at a native clock rate, wherein the pixel data is transmitted at the link data rate that is different than the native clock rate.